| Inde | ex of Claims |  |
|------|--------------|--|
|      |              |  |

| Application No.    | Applicant(s)  |  |
|--------------------|---------------|--|
| 10/643,507         | HARKER ET AL. |  |
| Examiner           | Art Unit      |  |
| Joseph P. Martinez | 2873          |  |

| / | Rejected | - | (Through numeral)<br>Cancelled |
|---|----------|---|--------------------------------|
|   | Allowed  | ÷ | Restricted                     |

| N | Non-Elected  |  |
|---|--------------|--|
| 1 | Interference |  |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|           |                                                    | L                                                |              |              |              |          | ı        |          | L                 |              |   |
|-----------|----------------------------------------------------|--------------------------------------------------|--------------|--------------|--------------|----------|----------|----------|-------------------|--------------|---|
|           |                                                    |                                                  |              |              |              |          |          |          |                   |              |   |
| Cla       | Date                                               |                                                  |              |              |              |          |          |          |                   |              |   |
| Final     | Original                                           | 2/5/04                                           |              |              |              |          |          |          |                   |              |   |
|           | 1                                                  | 1                                                |              | <del> </del> | ┢            | $\vdash$ | $\vdash$ | -        | -                 | -            | l |
|           | 1<br>2<br>3<br>4<br>5<br>6<br>7                    | 7                                                |              | _            | $\vdash$     | Г        | $\vdash$ |          | _                 | _            | ĺ |
|           | 3                                                  | 1                                                |              |              |              |          |          |          | $\vdash$          |              | 1 |
|           | 4                                                  | 1                                                |              | Г            |              |          |          |          |                   |              |   |
|           | 5                                                  | 7                                                |              |              |              |          |          |          |                   |              |   |
|           | 6                                                  | 1                                                |              |              |              | ·        |          |          |                   |              |   |
|           | 7                                                  | 1                                                |              | L            |              |          |          |          |                   |              |   |
|           | 8<br>9                                             | 1                                                |              |              |              |          |          |          | <u> </u>          | _            |   |
| ļ         | 9                                                  | ٧,                                               |              |              | _            |          |          |          | _                 | _            |   |
|           | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18 | ٧                                                |              | _            |              |          |          |          | _                 | _            |   |
| <u> </u>  | 11                                                 |                                                  | <u> </u>     | <u> </u>     | <u> </u>     | _        | -        | _        | -                 |              |   |
|           | 12                                                 | <u> </u>                                         | _            | _            | _            | _        | -        |          | -                 | -            |   |
|           | 14                                                 |                                                  | _            | _            | -            | _        |          | _        | -                 | -            |   |
|           | 15                                                 |                                                  |              | _            | $\vdash$     |          | $\vdash$ | -        | ┝                 | $\vdash$     |   |
|           | 16                                                 | -                                                | _            | ┝            | -            | -        | $\vdash$ | _        | $\vdash$          | -            | l |
|           | 17                                                 | $\vdash$                                         | _            | $\vdash$     | _            |          |          | _        | <del> </del>      | -            | 1 |
|           | 18                                                 |                                                  |              | H            |              |          |          |          | $\vdash$          | Г            | ı |
|           | 19                                                 |                                                  | _            | Г            | $\Box$       |          |          |          | $\vdash$          | $\vdash$     | ĺ |
|           | 20                                                 |                                                  | _            |              |              |          |          |          |                   |              | ĺ |
|           | 21                                                 |                                                  |              |              |              |          |          |          |                   |              | 1 |
|           | 22                                                 |                                                  |              |              |              |          |          |          |                   |              |   |
|           | 20<br>21<br>22<br>23                               |                                                  |              |              |              |          |          |          |                   |              | ] |
|           | 24<br>25                                           |                                                  |              |              |              |          |          |          |                   |              |   |
|           | 25                                                 | _                                                |              |              |              |          |          |          | _                 | _            | Į |
|           | 26                                                 |                                                  | _            | _            | L            |          |          |          | <u> </u>          | $oxed{oxed}$ |   |
|           | 26<br>27<br>28                                     | <u> </u>                                         | _            | _            | _            | ļ.,.     |          |          | <u> </u>          |              |   |
|           | 28                                                 | _                                                | _            | _            | _            |          |          |          | _                 | _            |   |
|           | 29<br>30                                           | H                                                | <u> </u>     | <u> </u>     |              | _        |          |          | ┝                 | H            |   |
|           | 31                                                 | -                                                | -            | ⊢            | $\vdash$     | <u> </u> | -        |          | -                 | -            |   |
| -         | 32                                                 | $\vdash$                                         | ├            | -            |              | <u> </u> |          |          | ┢                 | $\vdash$     |   |
| <b></b> - | 32<br>33                                           | -                                                | H            | $\vdash$     |              | $\vdash$ | -        |          | -                 | -            |   |
|           | 34                                                 | <del>                                     </del> | $\vdash$     | $\vdash$     | $\vdash$     | $\vdash$ | H        |          | $\vdash$          | Н            |   |
|           | 34<br>35                                           |                                                  | Г            | Г            | <u> </u>     |          |          |          | Г                 |              | 1 |
|           | 36                                                 |                                                  | Г            |              |              |          |          |          |                   |              |   |
|           | 37                                                 |                                                  |              |              |              |          |          |          |                   |              |   |
|           | 38                                                 |                                                  |              | 匚            |              |          |          |          | 匚                 |              |   |
|           | 39                                                 |                                                  | Ĺ            |              | 匚            |          |          |          | Ĺ                 |              |   |
|           | 40                                                 |                                                  | L            | <u> </u>     | L            | Ш        | <u> </u> | _        | $ldsymbol{f eta}$ | <u> </u>     |   |
| <u> </u>  | 41                                                 |                                                  | <u> </u>     | $\vdash$     | lacksquare   | <u> </u> | <b> </b> | L.       | <u> </u>          | L            |   |
| <b></b>   | 42                                                 | ├-                                               | $\vdash$     | $\vdash$     | <u> </u>     | <u> </u> | <b> </b> | <u> </u> | <u> </u>          | $\vdash$     |   |
|           | 43                                                 | <u> </u>                                         | <del> </del> | <del> </del> | <del> </del> | <u> </u> | <b>—</b> | _        | <u> </u>          | <u> </u>     |   |
|           | 44<br>45                                           | -                                                |              |              |              | -        | -        | -        |                   | -            |   |
| _         | 45                                                 | H                                                | $\vdash$     | -            | H            |          | $\vdash$ | _        | $\vdash$          | -            |   |
|           | 47                                                 | -                                                | $\vdash$     | $\vdash$     | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$          | $\vdash$     | - |
| <b></b>   | 48                                                 | $\vdash$                                         | $\vdash$     | $\vdash$     | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$          | $\vdash$     |   |
|           | 49                                                 | H                                                | $\vdash$     | $\vdash$     | $\vdash$     |          | H        |          | $\vdash$          | $\vdash$     |   |
|           | 50                                                 | 一                                                | $\vdash$     | H            | $\vdash$     |          | Г        | Т        | Т                 | Т            | 1 |

| Cla          | aim            |          |          |          | _ [        | Date     | •        |          |          |          |
|--------------|----------------|----------|----------|----------|------------|----------|----------|----------|----------|----------|
| Final        | Original       |          |          |          |            |          |          |          |          |          |
|              | 51             |          | $\vdash$ | $\vdash$ |            |          |          |          |          |          |
|              | 51<br>52       |          | $\vdash$ | ┢        | $\vdash$   |          |          |          | _        |          |
|              | 53             |          |          | _        |            |          | _        |          |          |          |
|              | 54             |          |          |          |            |          |          |          |          |          |
|              | 55             |          |          | Г        |            |          |          |          |          |          |
|              | 56             |          |          |          |            |          |          |          |          |          |
|              | 57             |          |          |          |            |          |          |          |          |          |
|              | 58             |          |          |          |            |          |          |          |          |          |
|              | 59             |          |          |          |            |          |          |          |          |          |
|              | 60             |          |          |          |            |          |          |          |          |          |
|              | 61             |          |          |          |            |          |          |          |          | <u> </u> |
|              | 62             |          |          |          |            |          |          |          |          |          |
|              | 63             |          |          |          |            |          |          |          |          |          |
|              | 64             |          |          | <u> </u> | _          |          |          |          |          |          |
|              | 65             |          |          |          |            |          |          |          |          |          |
|              | 66             |          |          |          | lacksquare |          |          |          |          |          |
|              | 67             | _        |          | <u> </u> | _          |          |          |          |          |          |
|              | 68             |          | _        | _        | lacksquare |          |          |          |          |          |
|              | 69             |          | _        | _        | _          | _        |          |          |          |          |
|              | 70             |          | _        | <u> </u> | _          |          | _        |          |          |          |
|              | 71             | _        | -        | L        | <u> </u>   | _        | _        | _        | _        |          |
|              | 71<br>72<br>73 | _        | -        | <u> </u> | -          | _        |          |          | -        |          |
|              | 74             |          | -        | ┝        | -          |          | -        |          |          |          |
|              | 74<br>75       | _        | -        | ⊢        | ┝          |          |          | _        |          |          |
|              | 76             |          | ┝        | ┝        | $\vdash$   | _        | -        | _        | -        | -        |
| <u> </u>     | 76<br>77<br>78 |          |          | -        | $\vdash$   | $\vdash$ | -        |          |          |          |
|              | 78             |          | _        | 1        | $\vdash$   | $\vdash$ | _        |          | $\vdash$ | -        |
|              | 79             |          | _        | _        |            | -        | _        |          |          |          |
|              | 80             |          | _        | -        |            | $\vdash$ |          |          |          |          |
|              | 81             |          |          |          | $\vdash$   | Т        | _        |          |          | Г        |
|              | 82             |          |          |          |            |          |          |          |          |          |
|              | 82<br>83       |          |          |          |            |          |          |          |          |          |
|              | 84             |          |          |          |            | Г        | Г        | Г        |          |          |
|              | 85             |          |          |          |            |          |          |          |          |          |
|              | 86             |          |          |          |            |          |          |          |          |          |
|              | 87<br>88       |          |          |          |            |          |          |          |          |          |
|              | 88             |          | L        | <u> </u> | _          |          | L        |          |          | L        |
|              | 89             | _        |          | _        | _          | L_       | <u> </u> | _        |          | <u>_</u> |
| <u> </u>     | 90             | _        |          |          |            |          |          | _        | L        | <u> </u> |
|              | 91             | _        |          | _        |            |          | _        | <u> </u> |          | ļ        |
|              | 92             | $\vdash$ | <u> </u> | $\vdash$ | <u> </u>   | <u> </u> | _        | <u> </u> | <u> </u> | <u> </u> |
|              | 93             | _        | _        |          | _          | <u> </u> | _        | _        |          | _        |
| _            | 94             | $\vdash$ |          | _        | _          | _        |          |          |          | -        |
|              | 95             |          |          |          | H          |          |          |          |          |          |
|              | 96<br>97       | H        | ⊢        | $\vdash$ | $\vdash$   | $\vdash$ | ⊢        | ⊢        | $\vdash$ | $\vdash$ |
|              | 98             | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |
|              | 99             |          | -        | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |
| <del> </del> | 100            | <u> </u> | $\vdash$ | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |
|              | וטטון          |          |          |          |            |          |          |          |          |          |

| Cla   | aim                             | Date     |          |          |          |          |          |          |          |                |  |
|-------|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|--|
| Final | Original                        |          |          |          |          |          |          |          |          |                |  |
|       | 101<br>102                      |          |          |          |          |          |          |          |          |                |  |
|       | 102                             |          |          |          |          |          |          |          |          |                |  |
|       | 103                             | L.       |          | <u> </u> |          |          |          |          |          |                |  |
|       | 104                             | Щ        |          | <u> </u> |          | $\vdash$ |          |          |          | Щ              |  |
|       | 105                             | <u> </u> |          | -        |          |          |          |          |          |                |  |
|       | 106<br>107                      | $\vdash$ | _        | <u> </u> | _        |          | _        | -        | _        | -              |  |
|       | 108                             | $\vdash$ |          | H        |          |          |          |          |          | $\vdash$       |  |
|       | 109                             | _        |          |          | _        | _        |          |          |          |                |  |
|       | 110                             |          |          |          |          | _        |          |          |          |                |  |
|       | 111<br>112                      |          |          |          |          |          |          |          |          |                |  |
|       | 112                             |          |          |          |          |          |          |          |          |                |  |
|       | 113                             |          |          | <u> </u> |          |          |          |          |          | Щ              |  |
|       | 114<br>115                      | $\vdash$ |          | <u> </u> |          | _        |          |          |          | Щ              |  |
|       | 116                             |          | _        | ⊢        | _        |          |          |          |          | -              |  |
|       | 117                             | -        |          | -        |          | ┝一       |          |          |          | Н              |  |
|       | 118                             | $\vdash$ |          | $\vdash$ |          | $\vdash$ |          |          |          | Н              |  |
|       | 119                             |          |          | $\vdash$ |          | $\vdash$ |          |          |          |                |  |
|       | 120                             |          | _        |          |          |          |          |          |          |                |  |
|       | 120<br>121                      |          |          |          |          |          |          |          |          |                |  |
|       | 122                             | П        |          |          |          |          |          |          |          |                |  |
|       | 122<br>123<br>124               |          |          |          |          |          |          |          |          |                |  |
|       | 124                             |          |          |          |          | _        |          |          |          | $\blacksquare$ |  |
|       | 125                             |          |          | _        | _        | _        | _        |          | _        | Н              |  |
|       | 125<br>126<br>127               |          |          | -        |          | ⊢        | _        | _        | -        | Н              |  |
|       | 128                             |          |          | -        |          | -        | _        |          |          | Н              |  |
|       | 129                             | -        | _        | -        |          | -        | -        | Т        | _        | $\vdash$       |  |
| _     | 128<br>129<br>130<br>131<br>132 | _        |          |          |          | _        |          | -        |          | П              |  |
|       | 131                             |          |          |          |          |          |          |          |          |                |  |
|       | 132                             |          |          |          |          |          |          |          |          |                |  |
|       | 133<br>134                      |          |          |          |          | L        |          |          |          | Щ              |  |
|       | 134                             |          | _        | <u> </u> | _        |          | <u> </u> | _        | <u> </u> | Щ              |  |
|       | 135                             |          | <u> </u> | <u> </u> |          | -        | <u> </u> | -        |          | H              |  |
|       | 136<br>137                      | -        | ⊢        | ⊢        |          | $\vdash$ | ⊢        |          | $\vdash$ | H              |  |
|       | 138                             | -        | ┝        | $\vdash$ |          |          | $\vdash$ | $\vdash$ | $\vdash$ | Н              |  |
|       | 139                             | -        | ╁        | $\vdash$ |          | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | Н              |  |
|       | 140                             | П        | Г        | Г        | П        | Π        | $\vdash$ | $\vdash$ | Г        | М              |  |
|       | 141                             |          |          |          |          |          |          |          |          |                |  |
|       | 142                             |          |          |          |          |          |          |          |          |                |  |
|       | 143                             |          |          |          |          | oxdot    |          | Ĺ        | oxdot    | Ш              |  |
|       | 144                             |          |          |          | _        |          | <u> </u> | _        | _        | -              |  |
|       | 145                             |          |          |          |          |          |          |          |          |                |  |
|       | 146<br>147                      | H        | ⊢        | $\vdash$ | $\vdash$ | $\vdash$ | -        | $\vdash$ | $\vdash$ | Н              |  |
|       | 148                             | $\vdash$ | Н              |  |
|       | 149                             |          | H        |          |          | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | H              |  |
|       | 150                             | П        | Т        | Т        | Т        | Т        |          | Т        | Т        | H              |  |
|       |                                 | _        | _        |          | _        |          |          | _        | _        |                |  |